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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,446	09/29/2003	Fumihito Hatayama	58604-030	6694

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600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

DHINGRA, PAWANDEEP

ART UNIT	PAPER NUMBER
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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/671,446

Applicant(s)

HATAYAMA, FUMIHIRO

Examiner

Pawandeep S. Dhingra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 1, 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/18/2005, 04/28/2004, 01/29/2004.

DETAILED ACTION

Drawing Objections

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the means for executing printing" in claim 1, and "storage means" in claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

1. Claims 1, and 5-6 are objected to because of the following informalities:
 - a. In Claims 1, the "printing executing step" shall be changed to "printing execution step".
 - b. In Claims 5-6, the term "process" shall be changed to "step" for making the claims more clear and easy to understand.

Appropriate corrections are required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 13-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 13-14 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized."

Claims 13-14, while defining a data does not define a "computer-readable medium" and is thus non-statutory for that reasons. A data structure can range from

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paper on which the data is written, to a data simply contemplated and memorized by a person.

"In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." - MPEP 2106.IV.B.1(a)

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 7-10, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Akiyama, EP 0 322 879 A2.

Re claim 7, Akiyama discloses an image data creating apparatus (see figures 4-5) for creating image data for producing prints (i.e. displaying, note that it is well known in the art to print the data shown on the display screen), comprising: a representative point (i.e. reference point) setting means for setting representative points (i.e. reference points, see figure 3) for use in controlling color tones in images (see column 1, lines 1-30); and information storage means for storing, along with said image data, representative point information including information on positions of said representative points (see column 1, lines 49-53, column 4, lines 8-14, column 5, lines 32-37).

Re claim 8, Akiyama further discloses representative point information includes information on color tones (i.e. density levels) at said representative points (see figure 3; column 5, lines 28-41).

Re claim 9, Akiyama further discloses said representative point information stored in said information storage means is corrected (see column 4, line 15 - column 5, line 41).

Re claim 10, Akiyama further discloses image data correcting means for correcting said image data so that color tones (i.e. density data) at the representative points agree with target color tones (see column 4, line 15 - column 5, line 41); wherein said information storage means is arranged to store said representative point information including said information on the positions of said representative points along with the image data corrected by said image data correcting means (see column 4, line 15 - column 5, line 41).

Re claim 13, Akiyama further discloses image data for producing prints (i.e. displaying, note that it is well known in the art to print the data shown on the display screen); and representative point information including information on positions of representative points set for controlling color tones in images to be printed (i.e. displayed, see above explanation) by using said image data (see column 1, lines 49-53; column 4, line 15 - column 5, line 41).

Re claim 14, Akiyama further discloses representative point information includes information on color tones (i.e. density levels) at said representative points (see figure 3; column 5, lines 28-41).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 U.S.C. 103 as being unpatentable over Shiraishi, US 2001/0038388 in view of Ozaki Ikuo, JP 11-240137 further in view of Akiyama, EP 0 322 879 A2.

Re claim 1, Shiraishi discloses a printing control method (i.e. color management technique) in time of a printing operation having an image data creating process for creating image data for making the prints (i.e. printing plates), and a printing process for performing printing based on the image data created in the image data creating process (see abstract and para 0002). Shiraishi further discloses a printing process includes: an information receiving step for receiving printing information along with said image data; a printing executing step for executing printing based on said image data (see para's 0029, 0036 & 0037).

Shirashi fails to disclose a printing control method for controlling color tones of prints, and wherein said image data creating process includes: a representative point setting step for setting representative points for use in controlling color tones in images; and a representative point information storing step for storing representative point information including information on positions of said representative points; and said printing process includes: an information receiving step for receiving said representative point information along with said image data; and a color tone controlling step for controlling the color tones of the prints by using image data of the prints produced in said printing executing step and said representative point information.

However, Ozaki Ikuo discloses a printing control method for controlling color tones of prints (see title and abstract), and a color tone controlling step for controlling the color tones of the prints by using image data of the prints produced and representative point information (i.e. color patches 11) (see abstract).

Akiyama discloses a image data creating process (i.e. setting-up process) includes: a representative point (i.e. reference point) setting step for setting representative points (i.e. reference points, see figure 3) for use in controlling color tones in images (see column 1, lines 1-30); and a representative point information storing step for storing representative point information including information on positions of said representative points (see column 1, lines 49-53, column 4, lines 8-14, column 5, lines 32-37); and a color tone controlling step for controlling the color tones of the prints by using image data of the prints produced (i.e. displayed) and representative point information (see column 4, line 15 - column 5, line 41, and column 1, lines 4-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the method and device for managing print colors as disclosed by Shirashi to include the color tone control system as taught by Ozaki Ikuo and a density indicator as taught by Akiyama for the benefit of having a system which can “*adjust the ink amount with high accuracy*” as taught by Ozaki Ikuo in abstract, and to have a “*density indicator for indicating the optical density level at a reference point on an image through an image correction process such as a colour correction and a tone correction*” as taught by Akiyama at column 1, lines 2-7.

Re claim 2, Akiyama discloses representative point information includes information on color tones (i.e. density levels) at said representative points (see figure 3; column 5, lines 28-41).

Re claim 3, Both Shirashi & Ozaki Ikuo disclose a printing process (see abstract of Shirashi & Ozaki Ikuo).

Shirashi & Ozaki Ikuo fail to disclose that a printing process is carried out for correcting the representative point information stored in said image data creating process.

However, Akiyama further discloses displaying process is carried out for correcting the representative point information stored in said image data creating process (see column 4, line 15 - column 5, line 41).

Re claim 4, Akiyama further discloses an image data correcting process (i.e. setting-up process) for correcting said image data so that the color tones (i.e. density

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data) at the representative points set in said representative point setting step agree with target color tones (see column 4, line 15 - column 5, line 41); wherein said information receiving step (i.e. transmission to CRT 64) is executed to receive said representative point information along with the image data corrected in said image data correcting process (see column 4, line 15 - column 5, line 41).

8. Claims 5-6, and 11-12 are rejected under 35 U.S.C. 103 as being unpatentable over Shiraishi, US 2001/0038388 in view of Ozaki Ikuo, JP 11-240137 further in view of Akiyama, EP 0 322 879 A2 further in view of Muramoto, US 6,798,536.

Re claim 5, Shirashi further discloses image data creating process includes a platemaking data creating process for creating platemaking data based on Raster Image Processing of multi-value image data (see abstract and para 0002).

Shirashi fails to disclose image data creating process includes a PDL data creating process for creating PDL data, and a platemaking data creating process for creating platemaking data based on said PDL data created in said PDL data creating process, said PDL data creating process and said platemaking data creating process using common representative point information.

Muramoto discloses image data creating process includes a PDL data creating process for creating PDL data and a platemaking data creating process for creating platemaking data based on said PDL data created in said PDL data creating process (see column 1, lines 17-20, column 2, lines 55-65, note that the generated PDL data is

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supplied to Raster Image Processor for creating image data for printing or platemaking purposes).

Akiyama discloses PDL data creating process (note that corrected colour density data is PDL data) (see column 4, lines 15-56) and platemaking data creating process (note that the corrected colour density data converted into YMCK data is the Platemaking data, see column 4, line 57 – column 5, line 25) using common representative point information (see column 4, line 15 - column 5, line 41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the method and device for managing print colors as disclosed by Shiraishi to include the color tone control system as taught by Ozaki Ikuo, a density indicator as taught by Akiyama, and apparatus for adjusting tone as taught by Muramoto for the benefit of having a system which can “*adjust the ink amount with high accuracy*” as taught by Ozaki Ikuo in abstract, and to have a “*density indicator for indicating the optical density level at a reference point on an image through an image correction process such as a colour correction and a tone correction*” as taught by Akiyama at column 1, lines 2-7, and to adjust “*the tone curve displayed on the display apparatus in response to displayed image manipulations entered via a manual command input device*” at column 1, lines 10-15.

(Also note that from the combined teaching of Shiraishi and Muramoto it is apparent that the multi-value image data of Shiraishi can be the PDL data, which then gets rasterized into high resolution output bitmap for platemaking purposes).

Re claim 6, Shiraishi discloses platemaking data creating process (see para 0002).

Shirashi fails to disclose that platemaking data creating process is carried out for correcting the representative point information used in said PDL data creating process.

Akiyama discloses image data creating process is carried out for correcting the representative point information used in said PDL data creating process (note that corrected colour density data is PDL data) (see column 4, line 15 - column 5, line 41).

Re Claim 11, claim 11 recites identical features, as claim 5, except claim 11 is an apparatus claim. Thus, arguments made for claim 5 are applicable for claim 11.

Re Claim 12, claim 12 recites identical features, as claim 6, except claim 12 is an apparatus claim. Thus, arguments made for claim 6 are applicable for claim 12.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pawandeep S. Dhingra whose telephone number is 571-270-1231. The examiner can normally be reached on M-F, 9:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pd

Pd
April 26, 2007

[Signature]
T. TWYLER, A.M.B.
SUPERVISORY PATENT EXAMINER